

AMENDMENT TO THE CLAIMS

a1
SUB 1
1. (Currently Amended) A method for producing a structured composite material having a plurality of apertures for accommodating passage of fluids through the structured composite material, the method comprising the steps of:

forming a first layer having a first shrinkage extent;
forming extruding a second layer onto the first layer, the second layer having a second shrinkage extent different from the first shrinkage extent;
~~bonding the second layer to the first layer to form a composite material;~~
forming the plurality of apertures through the second layer; and
shrinking at least one of the first layer and the second layer to produce the structured composite material.

2. (Original) The method of claim 1, wherein the plurality of apertures are formed through the second layer using one of pin embossing, slitting, laser embossing and thermal embossing.

3. (Cancelled)

4. (Original) The method of claim 1, further comprising the step of forming the plurality of apertures through the first layer.

5. (Original) The method of claim 1, further comprising the step of heating the composite material to affect shrinkage of at least one of the first layer and the second layer.

Sub 17 6. (Original) The method of claim 5, wherein the composite material is heated using one of infrared, hot air, microwave, a cure oven and a through-air-bonder.

7. (Original) The method of claim 1, wherein the second layer is bonded to the first layer by one of thermal bonding, pin bonding, point bonding and differential speed bonding.

8. (Original) The method of claim 1, further comprising the step of stretching the second layer before the second layer is bonded to the first layer.

a 9. (Original) The method of claim 8, wherein the second layer is stretched in a machine direction to about 1.5 to about 6.0 times an initial length.

10. (Original) The method of claim 8, wherein the second layer is stretched in a machine direction to about 2.0 to about 4.0 times an initial length.

Sub C7 11. (Original) The method of claim 1, wherein the apertures formed each have a diameter of about 100 microns to about 10,000 microns.

12. (Original) The method of claim 1, wherein the apertures are formed by producing a plurality of slits through at least the second layer, and opening each slit to form a corresponding aperture.

13. (Original) The method of claim 12, wherein the slits are formed using expanded metal plates.

Sub 17

14. (Original) The method of claim 12, wherein the slits are formed in one of a machine direction, a cross machine direction and an angular direction.

15. (Original) The method of claim 12, further comprising the step of forming slits in the first layer.

16. (Original) The method of claim 1, wherein the first layer comprises a polypropylene polymer.

Q1

17. (Original) The method of claim 1, wherein the second layer comprises an ethylene-polypropylene random copolymer.

18. (Original) The method of claim 1, wherein the second layer comprises a film.

Sub 17
19. (Original) The method of claim 18, wherein a filler is added to the film.

20. (Original) The method of claim 19, wherein the filler is selected from the group consisting of clay, calcium carbonate, diatomaceous earth, titanium dioxide, and talc.

21. (Original) The method of claim 18, wherein the first layer comprises a nonwoven web.

22. (Cancelled)

Sub d

23. (Currently Amended) The method of claim 22 24, wherein the apertures each have a diameter of about 100 microns to about 10,000 microns.

24. (Currently Amended) ~~The method of claim 22;~~ A method for producing a structured heterogenous material having a plurality of apertures for accommodating passage of fluids through the structured heterogeneous material, the method comprising the steps of:

providing a first homogeneous component having a first shrinkage extent;

providing a second homogeneous component having a second shrinkage extent different from the first shrinkage extent;

forming a heterogeneous material by combining the first homogeneous component and the second homogeneous component;

forming the plurality of apertures in the heterogenous material; and

shrinking at least one of the first homogeneous component and the second homogeneous component to form the structured heterogeneous material,

wherein the apertures are formed by producing a plurality of slits through the heterogeneous material, and opening each slit to form a corresponding aperture.

25. (Currently Amended) The method of claim 22 24, wherein expanded metal plates produce the slits in the heterogeneous material.

26. (Currently Amended) The method of claim 22 24, wherein the slits are formed in one of a machine direction, a cross machine direction and an angular direction.

Sub 27. (Currently Amended) The method of claim 22 24, further comprising the step of shrinking the first homogeneous component relative to the second homogeneous component to produce the structured heterogeneous material.

28. (Currently Amended) The method of claim 22 24, further comprising the step of shrinking the second homogeneous component relative to the first homogeneous component to produce the structured heterogeneous material.

a 29. (Currently Amended) A method of producing a heterogeneous material having a structure for accommodating passage of fluids through the heterogeneous material, the method comprising the steps of:

forming a the heterogeneous material having by combining a first homogeneous component with a first shrinkage extent and a second homogeneous component with a second shrinkage extent different from the first shrinkage extent; applying a plurality of slits through the heterogeneous material; and heating the heterogeneous material to shrink at least one of the first homogeneous component and the second homogeneous component to produce a the structure, whereby each slit opens to form an aperture.

30. (Currently Amended) The method of claim 29, further comprising the step of applying a topsheet to the heterogeneous material before heating the heterogeneous material, wherein the topsheet has a shrinkage extent different from the first shrinkage extent and the second shrinkage extent.

31. (Original) The method of claim 29, wherein the topsheet comprises one of a film and a meltspun fabric.

Serial No.: 09/871,171

Docket No.: KCC-15,135

a 1

Claims 32-41.

(Cancelled)

2/1/2015